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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/771,963	02/04/2004	Ryan L. Roach	23455/P-6223	3837
27784	7590	04/20/2005	EXAMINER	
LAW OFFICE OF LAWRENCE E. LAUBSCHER, JR. 1160 SPA ROAD, SUITE 2B ANNAPOLIS, MD 21403			BLAU, STEPHEN LUTHER	
			ART UNIT	PAPER NUMBER
			3711	

DATE MAILED: 04/20/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/771,963

Applicant(s)

ROACH ET AL.

Examiner

Stephen L. Blau

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 March 2005.
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 11-21 is/are pending in the application.
4a) Of the above claim(s) 14-16 is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 11-13 and 17-21 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 11-13 and 17-21 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 19 requires the center of gravity closer to the bottom portion of a body as loft increases which is opposite to the claim it depends on which requires a long iron with a center of gravity located closer to the bottom portion of a body than a mid iron and the short iron (Claim 17). Claim 17 is indefinite in that it discusses a set of clubs center of gravity location yet the specification is discussing the heads center of gravity location. In claim 17 it is uncertain whether a center of gravity of a club or a head is being claimed. Claims 11-13, 18, and 20-21 are rejected for depending on a rejected base claim.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and

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the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 11-13, 17, and 19-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shaw (5,423,535) in view of Gilbert.

Shaw (5,423,535) discloses a set of clubs having a striking face area containing a recess, an insert secured within said recess, an outer surface of an insert being substantially flush with a non-recessed portion of a face area (Figs. 11, 40), a density of an insert increasing with a set from long irons to short irons (Col. 3, Lns. 32-35), an insert having a thickness increasing from a sole to a top (Fig. 34), an insert having a thickness increasing from a top to a sole (Fig. 36), and modifying the center of gravity in a vertical direction by adjusting the thickness of a face insert in a vertical direction (Col. 4, Lns. 1-18).

Shaw (5,362,047) lacks a thickness of an insert decreasing from long irons to short irons, a center of gravity moving progressively forward as loft increases and a set of irons from long irons to short irons increasing in loft.

Gilbert discloses a set of irons from long irons to short irons increasing in loft (Figs. 9-10), modifying a head thickness in back of a face to move the center of gravity of a head such that it rises from the long irons to the short irons (Figs. 9-10), and a center of gravity moving progressively forward as loft increases (Figs. 9-10) in order for a golfer to see a peak trajectory height along a line for each club head that is substantially more consistent along that line throughout the set than prior art club provide (Col. 1, Lns. 55-67). In view of the patent of Gilbert it would have been obvious

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to modify the head of Shaw to have a thickness of an insert decreasing from long irons to short irons in the form of decreasing a bottom thickness of an insert while increasing the top thickness of an insert in order to utilize an insert's thickness in changing the center of gravity to be lower for lower loft clubs and to have a center of gravity moving progressively forward as loft increases in a set in order for a golfer to see a peak trajectory height along a line for each club head that is substantially more consistent along that line throughout the set than prior art club provide. In view of the patent of Gilbert it would have been obvious to modify the head of Shaw to have a set of irons from long irons to short irons increasing in loft in order to have a variety of different clubs with different ranges for the same swing speed to select from when playing a round of golf.

5. Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Shaw (5,423,535) in view of Gilbert as applied to claims 11-13, 17, and 19-20 above, and further in view of Peters.

Shaw lacks a long iron having a loft angle in the range of 16-24 degrees, a mid iron having a loft angle in the range of 26-38 degrees, and a short iron having a loft angle in the range of 42-60 degrees. Peters discloses a set of club with the center of gravity moving further from a bottom portion as loft increases (Fig. 31) with a long iron having a loft angle in the range of 16-24 degrees, a mid iron having a loft angle in the range of 26-38 degrees, and a short iron having a loft angle in the range of 42-60 degrees (Col. 7, Lns. 15-35). In view of the patent of Peters it would have been obvious

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to modify the set of clubs of Shaw to have a long iron having a loft angle in the range of 16-24 degrees, a mid iron having a loft angle in the range of 26-38 degrees, and a short iron having a loft angle in the range of 42-60 degrees in order to utilize lofts used in the market place for different irons and to have a variety of different clubs with different ranges for the same swing speed to select from when playing a round of golf.

6. Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Shaw (5,423,535) in view of Gilbert as applied to claims 11-13, 17, and 19-20 above, and further in view of Anderson and Shira.

Shaw discloses a density of an insert increasing with a set from long irons to short irons (Col. 3, Lns. 32-35).

Shaw lacks a long iron insert being titanium, a mid iron insert being a 17-4 steel material, and a short iron insert being a 1030 carbon steel material.

Anderson discloses face inserts being titanium, stainless steel, and carbon steel (Col. 1, Lns. 50-54). Anderson does not disclose the type of carbon steel but clearly an artisan skilled in the art of using carbon steel for a face would have selected a suitable carbon steel in which a 1030 carbon steel is included. Shira discloses a 17-4 stainless steel used for a face of an iron (Col. 3, Lns. 58-60). In view of Anderson it would have been obvious to modify the irons of Shaw to have a long iron insert being titanium, a mid iron insert being a stainless steel material, and a short iron insert being a carbon steel material in order to utilize face material with different densities used in the art for golf for face materials. In view of Shira it would have been obvious to modify the set of

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irons of Shaw to have a mid iron insert being a 17-4 stainless steel in order to utilize a known stainless steel used in the art of golf. It would have been obvious to modify the set of irons of Shaw to have carbon steel being 1030 carbon steel in order to utilize a known carbon steel utilized in the market place.

Response to Arguments

7. Applicant's arguments with respect to claims 11-13 and 17 have been considered but are moot in view of the new ground(s) of rejection.


8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Conclusion

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steve Blau whose telephone number is (571) 272-4406. The examiner is available Monday through Friday from 8 a.m. to 4:30 p.m.. If the examiner is unavailable you can contact his supervisor Greg Vidovich whose telephone number is (571) 272-4415. Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 308-0858. (TC 3700 Official Fax 703-872-9306)

slb/ 17 April 2005


STEPHEN BLAU
PRIMARY EXAMINER